Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1-46. (cancelled).

47. (currently amended) A method for synthesizing one or more cDNA molecules comprising ~~mixing~~ combining one or more mRNA templates, or one or more poly A RNA templates with at least one polypeptide having reverse transcriptase activity and an antibody or antibody fragment inhibitor of the polypeptide having reverse transcriptase activity, ~~under conditions that~~ incubating said template, polypeptide and inhibitor at a temperature between 10°C and 90°C, ~~inhibit, prevent or reduce the synthesis of non-specific cDNA products when compared to when said inhibitor is absent;~~ wherein said inhibitor inhibits said reverse transcriptase activity ~~under said conditions~~ at said temperature; and elevating said temperature to inactivate said inhibitor, whereby ~~synthesizing~~ one or more cDNA molecules are synthesized.

48. (canceled)

49. (currently amended) The method of claim ~~48~~ 47, wherein said antibody or antibody fragment is polyclonal or monoclonal.

50. (canceled)

51. (previously presented) The method of claim 47, wherein said polypeptide is a reverse transcriptase selected from the group consisting of M-MLV RT, RSV RT, AMV RT, RAV RT, MAV RT and HIV RT, and fragments or mutants thereof having reverse transcriptase activity.

52. (previously presented) The method of claim 51, wherein said reverse transcriptase is reduced in RNase H activity.

53. (currently amended) The method of claim 47, wherein said ~~conditions comprise annealing or hybridizing one or more primers to said template at temperatures that~~ inhibitor inhibits, prevents, or reduces internal priming.

54. (currently amended) The method of claim ~~53~~ 47, wherein said temperature is ~~within the range of 10-90°C~~ less than 65°C.

55. (currently amended) The method of claim ~~53~~ 47, wherein said temperature is ~~within the range of about 20-75°C~~ less than 55°C.

56. (currently amended) The method of claim ~~53~~ 47, wherein said temperature is ~~within the range of about 45-65°C~~ less than 45°C.

57. (currently amended) The method of claim ~~47~~ 118, wherein ~~said conditions comprise the use of a~~ the primer to template ratio is between 15:1 and 1:15.

58. (previously presented) The method of claim 57, wherein said primer to template ratio is between 10:1 and 1:10.

59. (previously presented) The method of claim 57, wherein said primer to template ratio is between 5:1 and 1:5.

60. (currently amended) The method of claim ~~47~~ 118, wherein ~~said conditions comprise the use of a~~ said primer ~~having~~ has a length of between 20 and 100 bases.

61. (previously presented) The method of claim 60, wherein said length is between 20 and 75 bases.

62. (previously presented) The method of claim 60, wherein said length is between 20 and 50 bases.

63. (previously presented) The method of claim 60, wherein said length is between 25 and 35 bases.

64-105 (cancelled).

106. (canceled)

107. (currently amended) The method of claim ~~106~~ 47, wherein said polypeptide is a retroviral reverse transcriptase.

108. (canceled)

109. (canceled)

110. (canceled)

111. (previously presented) The method of claim 52, wherein said RNase H activity is reduced to less than about 30% of RNase H activity of a corresponding wildtype reverse transcriptase.

112. (currently amended) The method of claim 47, wherein said polypeptide is a reverse transcriptase selected from the group consisting of M-MLV RT, RSV RT and AMV RT~~, and said inhibitor is an antibody or antibody fragment~~.

113. (previously presented) The method of claim 112, wherein said reverse transcriptase is a M-MLV RT having an RNase H activity less than about 30% of the RNase H activity of the corresponding wildtype M-MLV RT.

114. (currently amended) Then method of claim 112, wherein said reverse transcriptase is selected from the group consisting of ~~SuperScript™, SuperScript™ II,~~

~~ThermoScript™, and ThermoScript™ II~~ SUPERSCRIPT™ mutant M-MLV RT, SUPERSCRIPT™ II mutant M-MLV RT, THERMOSCRIPT™ mutant AMV RT and THERMOSCRIPT™ II mutant AMV RT.

115. (previously presented) The method of claim 47, wherein said one or more mRNA templates is a population of mRNA templates suitable for the production of a cDNA library.

116. (previously presented) The method of claim 47, wherein said cDNA molecules are a cDNA library.

117. (new) The method of claim 47, wherein said temperature is less than 35°C.

118. (new) The method of claim 47, further comprising combining a primer with said templates, polypeptide and inhibitor.